Subject: [ilrs-newg] NESC agenda - 18th November

Date: Tuesday, November 16, 2021 at 10:49:25 AM Eastern Standard Time

From: Matthew Wilkinson via ilrs-newg

To: ILRS NESC

Dear NESC colleagues,

The next ILRS Networks & Engineering Standing Committee online meeting is scheduled for **Thursday 18th November** at **1400UTC**. The Microsoft Teams link is below:

# Microsoft Teams meeting

Join on your computer or mobile app Click here to join the meeting

Please send me any items for the agenda, So far we have:

**ILRS Networks and Engineering Standing Committee** 

Meeting Thurs 18<sup>th</sup> November 2021

#### **Draft Agenda**

- 1. Chair report from previous meeting
- 2. Update on the travelling met device campaign. Clément Courde
- 3. Data accuracy analysis of Chinese SLR stations in the first half of 2021 Yong Huang
- A novel picosecond-precision event timing device for SLR by integrating with highrepetition-rate RGG Wu Zhibo.
- 5. Any other NESC business
  - Any news?
  - Offers for future items or requests for presentations
- 6. DATE FOR NEXT MEETING

Below is the report from our previous meeting in August.

**Thanks** 

Matt Wilkinson

Chair, NESC

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SGF, Herstmonceux <a href="http://sgf.rgo.ac.uk">http://sgf.rgo.ac.uk</a>

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## Report from NESC meeting on Thursday 26<sup>th</sup> August 2021

The NESC held a meeting on Thursday 26<sup>th</sup> August on Microsoft Teams with **35** participants online.

#### CPF and CRD v2

**Randy Ricklefs** gave a further update on switching to CPF & CRD v2. CPFv2 predictions are now available for all satellites. 16 stations are using these and additional reminders will be sent to the stations shortly. The deadline is 1<sup>st</sup> October.

CRDv2 is validated at the Operational Centers and Data Centers. Some stations have not produced enough LAGEOS, Lares and Etalon data to meet the ASC testing criteria. Stations may instead be vetted by the comparisons at the OCs and also through the work of Van Husson. The goal is to complete the conversion effort by the end of 2021.

### Meteorological Measurements / Travelling Barometer

**Clément Courde** presented some slides describing the proposal to send a barometer to SLR stations in the ILRS network. He will provide a calibrated Vaisala PTU303, which records pressure temperature and humidity. This would enable a station to check their met sensors and how they refer to the reference point of the system and would allow for a comparison between ILRS stations.

How this device should be installed was discussed. Gerog Kirchner warned against the temperature dependence of pressure devices and recommended that they are placed inside environmentally controlled rooms. However, this would prevent any temperature and humidity comparisons. Toshi said that wind exposure also impacted readings. It was thought that a week of data beside the primary station barometer is needed and this period should include a significant amount of pressure variation. Stations could also take measurements at a second position at the system reference point. Sven Bauer suggested prioritising stations with only one met device. Clément can provide a Windows and Linux executable to collect data. The data from the travelling device and the data collected by the devices at the station should be stored safely somewhere together. The urgency of the campaign should be stressed to participating stations so that the device can reach many stations as soon as possible.

We also discussed the possibility for other touring equipment. In the past there have been event timers sent to stations. The SP-DART project, developed at Graz, is a working, transportable SLR station kit minus the telescope. It can convert any telescope that can track satellites to a SLR station and would allow timing, accuracy and return signal comparisons. Georg is open to discussion about installing it on telescopes near to SLR stations.

#### Discussion on NESC session for the Virtual Tour

The NESC contribution to the ILRS Virtual Tour in October was discussed. We were requested to provide a summary talk about our activities and this could include one or two 'hot-topics'. Matt Wilkinson will put this together and he suggested some of the quality control work from Van Hussan could be highlighted. In addition, a report on the GASTON campaign could be included.

The presentation slides from the meeting will be available here <a href="https://ilrs.gsfc.nasa.gov/network/newg/newg\_activities.html">https://ilrs.gsfc.nasa.gov/network/newg/newg\_activities.html</a>

If you missed the meeting and would like to catch up, please send me an email (<a href="mailto:matwi@nerc.ac.uk">matwi@nerc.ac.uk</a>) and I can provide the recording.

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